



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

4.5NR-25-PO
Job Sheet 181468



Part No: 4.5NR-25-PO

Job Qty: 6 ea

Part Name: Side Plate Solenoid



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 7/27/18

Job Tracking No:

Due Date: ~~8/10/18~~ 8/20/18

Created By: Marie Lajeunesse

Type: Stock

Description:

Note: 4.5NR-25 REV.7 IPP REV:A 18.07.27 NEW ISSUE DD VERF:JFS ✓

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
100	Purchasing	6 pcs		8/10/18	0.00	0.00			AUG 17 2018
110	Packaging	6 pcs		8/10/18	0.00	0.00	Packaging2		AUG 17 2018
120	QC	6 pcs		8/10/18	0.00	0.00	QC6		
130	Packaging	6 pcs		8/10/18	0.00	0.00	Packaging3-2		
140	QC21-SA	6 Ea		8/10/18	0.00	0.00	QC21		18.09.06

Part Op 100 - Issue PO to ARROW TECH MACHINE WORKS P/O: 040638 MANUFACTURE 4.5NR-25 AS PER DWG.
Descriptions: -Certificate of conformity is required

July 30, 2018 x 6 [Signature]

MA 143

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
4.5NR-25P	Side plate Solenoid	6 pcs (1 ea)	100-Purchasing	S103402

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
100-Purchasing	4.5NR-25P	6	3	0

Part Specifications

Specifications could not be found.

Plex 7/27/18 10:55 AM Dart.lajeunesse.marie



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CANADA
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Container No: S103403



Part: 4.5NR-25

Job No: 181468

Serial No/Batch: S103403

Revision: 7

Inspector:

Exp Date:

Instructions:

Date: 08/20/18

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

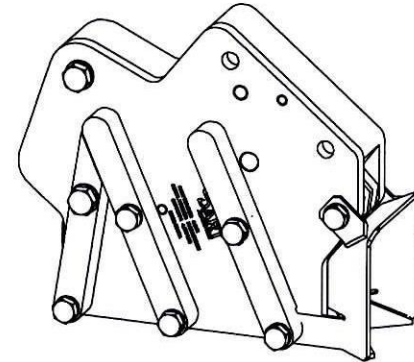
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐			
Design ☐	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐			
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐			
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐			
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐			
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐			
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐			
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐			
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐			
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐			
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER :						
Misidentified ☐	☐	Past Due ☐							

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ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS	PG.
			4.5NR-3	2	LOAD STOP STIFFENER			2
			4.5NR-4	2	SIDE STIFFENER			2
			4.5NR-6	1	SIDE PLATE COVER			2
			4.5NR-7	2	LIFTER BUSHING			3
			4.5NR-8	1	LIFTER			2
			4.5NR-9	2	LIFTER/LOAD STOP SPRING			2
			4.5NR-10	1	LOCK ROLLER PIN			3
			4.5NR-12	1	LATCH			3
			4.5NR-13	1	LOCK BEARING SCREW			3
			4.5NR-14	1	LOCK ROLLER			3
		B/O	4.5NR-15	1	LOCK BEARING	STEEL	(McGILL #CYR3/45)	3
			4.5NR-16	1	LOCK			3
			4.5NR-17	1	LOCK BUSHING			3
			4.5NR-18	1	LOAD STOP			2
			4.5NR-20	2	LOAD STOP BUSHING			2
		B/O	4.5NR-21	3	SPRING ANCHOR	SS	Ø3/16 X 1 (MCMMASTER-CARR #97386A251)	2
			4.5NR-23	1	LOAD STOP BACK BUMPER			2
			4.5NR-24	1	LOAD STOP FRONT BUMPER			2
			4.5NR-25	1	SIDE PLATE SOLENOID			2
			4.5NR-27	1	SOLENOID			2
			4.5NR-28	1	SOLENOID COVER			2
		B/O	4.5NR-30	2	SOLENOID COVER SCREW	SS	1/4-28 X 1/2 (MCMMASTER-CARR #92196A317)	2
			4.5NR-32	1	MANUAL RELEASE KNOB			2
			4.5NR-33	1	CAGE SPACER			2
			4.5NR-34	2	LOAD RAIL			2
			4.5NR-35	2	LATCH BUSHING			3
			4.5NR-36	2	LATCH SPRING			2
			4.5NR-38	1	TUNNEL SUB-ASSEMBLY			2
		B/O	4.5NR-39	1	KEEPER SPRING	SS	Ø.067 X 5 DENDOFF	3
			4.5NR-40	1	KEEPER			3
			4.5NR-41	1	LATCH ROLLER			3
			4.5NR-43	1	LEVER			3
		B/O	4.5NR-44	1	LATCH PIN	STEEL	Ø5/16 X 1-1/4 (MCMMASTER-CARR #98381A585)	3
			4.5NR-45	1	LATCH ROLLER PIN			3
			4.5NR-46	1	LEVER BUSHING			3
			4.5NR-47	1	FRONT STIFFENER			2
		B/O	4.5NR-50	1	LIFTER PIN	STEEL	Ø1/4 X 1-1/4 (MCMMASTER-CARR #96381A544)	3
			4.5NR-52	1	KEEPER BUSHING			3
			20NR-56	3	SPRING ANCHOR			2,3
		B/O	C10-7	2	LOCATING PIN	STEEL	Ø1/4 X 1-1/4 (MCMMASTER-CARR #96381A544)	2
		B/O	C45-3-2-1	2	SNAP RING	STEEL	Ø3/8 (KAMAN 1400-0037)	3
		B/O	C45-3-4-1	2	RETAINING RING	BERYLLIUM COPPER	3/16 SHAFT (MCMMASTER-CARR #9841CA101)	3
		B/O	C45-3-5	2	SPACER	TEFLON	(MCMMASTER-CARR #9560A1801)	3
		B/O	C45-10-1	1	SPRING PIN	SS	1/4 X 1.0 (MCMMASTER-CARR #92373A183)	3
		B/O	C45-15-2	2	SPACER	NYLON	(MCMMASTER-CARR #9560A210)	3
		B/O	1884-PP35-1032-1/4	2	SET SCREW	SS	10-32 X 1/4 (MCMMASTER-CARR #94355A330)	2
		B/O	AN6-13A	6	RAIL BOLT	STEEL	3/8-24 X 1-29/64	2
		B/O	AN6-14A	1	FRONT BOLT	STEEL	3/8-24 X 1-1/2	2
		B/O	AN6-24A	1	KEEPER BOLT	STEEL	3/8-24 X 2-1/2	2
		B/O	AN6-40A	1	BOLT	STEEL	3/8-24 X 4	2
		B/O	AN7-24A	1	LOCK BOLT	STEEL	7/16-20 X 2.59	2
		B/O	AN7-40A	1	THROUGH BOLT	STEEL	7/16-20 X 4	2
		B/O	AN960-10L	2	SOLENOID WASHER	STEEL	#10	2
		B/O	AN960-61S	9	AN6 WASHER	STEEL	Ø3/8	2
		B/O	AN960-61SL	2	KEEPER WASHER, LOW PROFILE	STEEL	Ø3/8	2
		B/O	AN960-71A	4	AN-7 WASHER	STEEL	Ø7/16	2
		B/O	MS21044N16	1	LOCK NUT	STEEL	3/8-24	2
		B/O	MS21044N7	2	LOCK NUT	STEEL	7/16-20	2
		B/O	MS21083N3	2	SELF-LOCKING NUT	STEEL	#10-32	2
		B/O	MS21083N6	1	HEX NUT	STEEL	3/8-24	2
		B/O	CORD GRIP	1	CORD GRIP	BRAZS	M8 X 1.25 (MCMMASTER-CARR #8183F6)	2
		B/O	11-04473	1	WIRE	16 GA SHIELDED WIRE	14 IN. (AIRCRAFT SPEKUC #11-04473)	3
		B/O	EL-PLUG-M	1	MALE PLUG	PE HIGH DENSITY	(MCMMASTER-CARR #7216K5)	3
		B/O	32446	2	22-16 AWG KNIFE CONNECTOR		(ALLIED ELECTRONICS #32446)	3
		B/O		1	HEAT SHRINK TUBE	RUBBER	(MCMMASTER-CARR #2593K22)	N/S

REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
1		REMOVED 2 CONNECTORS #32446, ADDED TO DWG 4.5NR-27	10/29/2013	JAG	
1A	14-0080	CHD B/O B/O 4.5NR-8 WAS 3/8-24 X 1.33 AN6-12A B 3/8-24 X 1.29/64, CHD 4.5NR-13 FROM A B/O TO A MODIFIED B/C, CHD SHEETS FROM B8 TO DART 4.5NR-19 CHD PART NUMBER TO 20NR-56.	7/21/2014	DUN	RW
2	15-0076	UPDATED TO NEW DRAFTING STANDARDS, UPDATED P/N'S TO MIL SPEC NUMBERS, 4.5NR-30 CHD B/O INFO WAS 1/4-28 X 1/32 MS27039-408 IS 1/4-28 X 1/2 #92196A317, ADDED 4.5NR-38 MS21083NA.	4/13/2015	DPD	JAG
3	15-0178	4.5NR-31 CHD QTY WAS 1 B 2, AN960-71A CHD QTY WAS 3 B 4, CHD P/N WAS MS21044N3 B MS21083NA, AN960-61AL ADDED TO BOM QTY 2.	7/21/2015	DPD	JAG
4	15-0359	4.5NR-29 REPLACED W/ CORD GRIP, 4.5NR-31 REPLACED W/ 188-PP35-1032-1/4, AN365-424A REPLACED W/ MS21044NA, AN365-720A REPLACED W/ MS21044N7, ADDED ENTRAVINS DETAIL AND NOTE.	11/13/2015	DPD	JAG
5	16-0070	UPDATED TO NEW STANDARDS, C10-7 ADDED TO BOM QTY 2, M27500-16TG2T14 REPLACED W/ 11-04473.	7/8/2016	DPD	SW



DART AEROSPACE	
TITLE	
4.5 NUBBINS RECEIVER	
DWG NO.	4.5NR
REV	5
MATL	UNLESS OTHERWISE SPECIFIED
HEAT	DIMENSIONS ARE IN INCHES
FINISH	.XXX ± .005 FRACTIONS ± 1/8
SPEC	.XX ± .01 ANGLES ± 5°
DRAWN BY:	1. BREAK ALL SHARP EDGES
CHECKED:	.015 X 45° OR .015R
OPPS APPR:	2. DIMENSIONAL LIMITS APPLY
QA APPR:	AFTER PLATING
APPROVED:	3. INTERPRET DIM AND TOL PER
SCALE	ASME Y14.5M-2009
1:3	USED ON MODEL
DATE	12/23/1997
SHEET	1 OF 4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

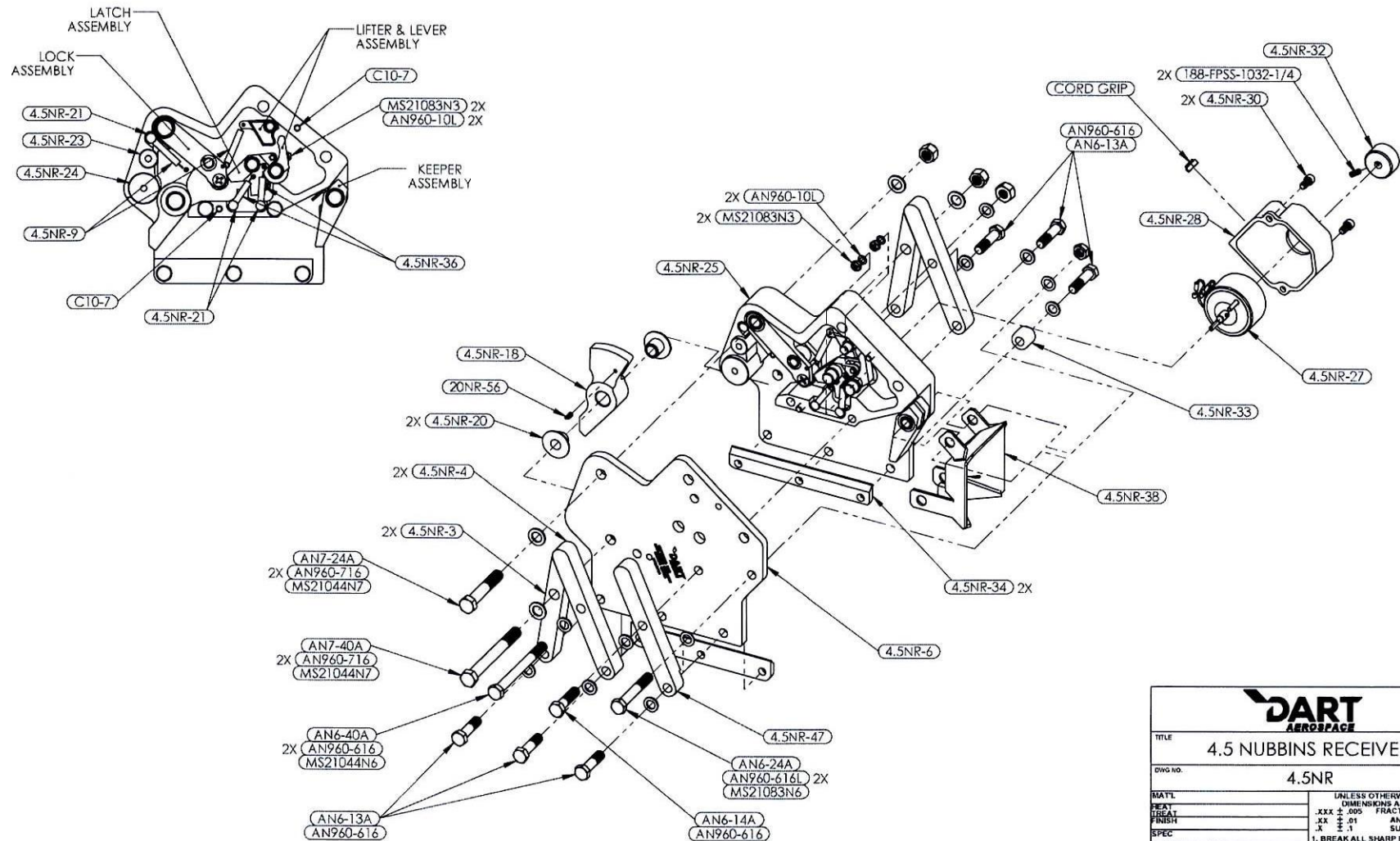
QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
Root Cause		FAULT CATEGORY							
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐				
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐				
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐				
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐				
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐				
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐				
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

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REVISIONS			
REV	ECR	DESCRIPTION	DATE INITIAL APPROVED



DART AEROSPACE	
TITLE 4.5 NUBBINS RECEIVER	
DWG NO. 4.5NR	REV 5
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES .XXX ± .005 FRACTIONS ± 1/8 .XX ± .01 ANGLES ± 5° .X ± .1 SURFACES ± 125	
SPEC 1. BREAK ALL SHARP EDGES .015 x 45° OR .015R 2. DIMENSIONAL LIMITS APPLY AFTER PLATING 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009	
DRAWN BY: CANAM CHECKED: CLOUGH OPDS APPR: ANDERSON QA APPR: LINDSAY APPROVED: MACKOVJAK	
SCALE 1:3	DATE 12/23/1997
SHEET 2 OF 4	

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

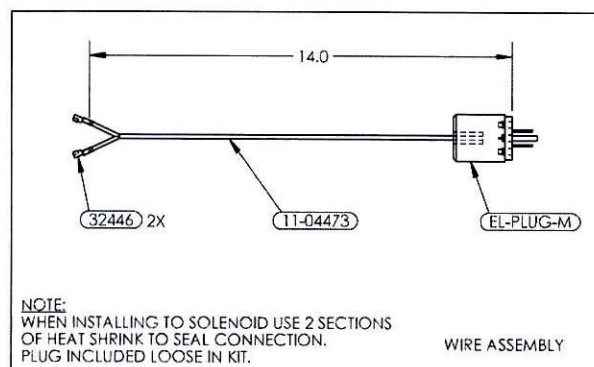
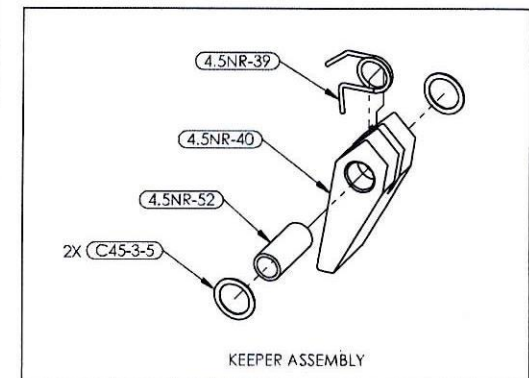
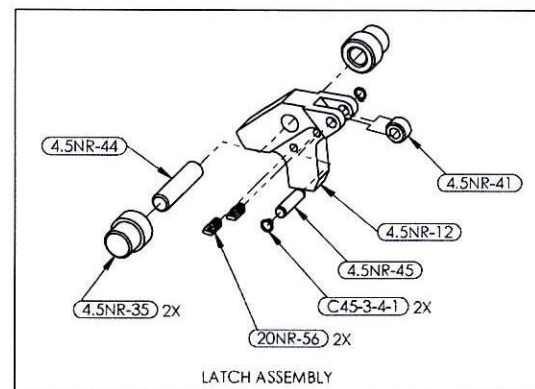
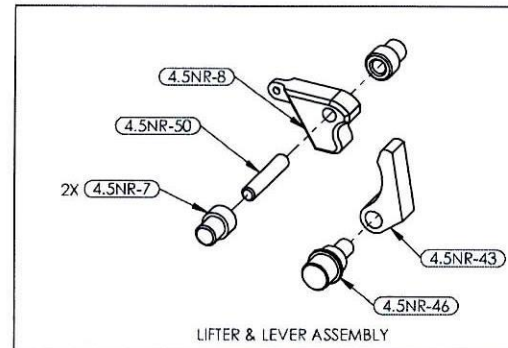
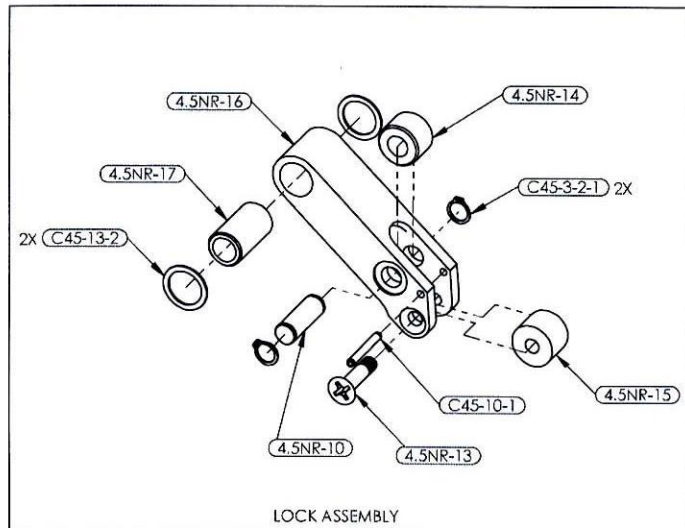
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Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
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Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

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REVISIONS			
REV	ECR	DESCRIPTION	DATE INITIAL APPROVED
1		REMOVED 2 CONNECTORS #32446, ADDED TO DWG 4.5NR-27	10/29/2013 JAG



DART AEROSPACE											
TITLE 4.5 NUBBINS RECEIVER											
DWG NO. 4.5NR	REV 5										
<table border="1"> <tr> <td>MAT'L</td> <td>UNLESS OTHERWISE SPECIFIED</td> </tr> <tr> <td>HEAT</td> <td>DIMENSIONS ARE IN INCHES</td> </tr> <tr> <td>TREAT</td> <td>.XXX ± .005 FRACTIONS ± 1/8</td> </tr> <tr> <td>FINISH</td> <td>.XX ± .01 ANGLES ± 5°</td> </tr> <tr> <td>SPEC</td> <td>.X ± .1 SURFACES ± 125</td> </tr> </table>		MAT'L	UNLESS OTHERWISE SPECIFIED	HEAT	DIMENSIONS ARE IN INCHES	TREAT	.XXX ± .005 FRACTIONS ± 1/8	FINISH	.XX ± .01 ANGLES ± 5°	SPEC	.X ± .1 SURFACES ± 125
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QA APPR:	LINDSAY										
APPROVED:	MACKOVJAK										
SCALE 1:2	DATE 12/23/1997										
SHEET 3 OF 4											

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

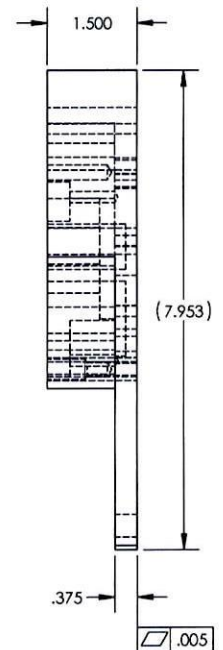
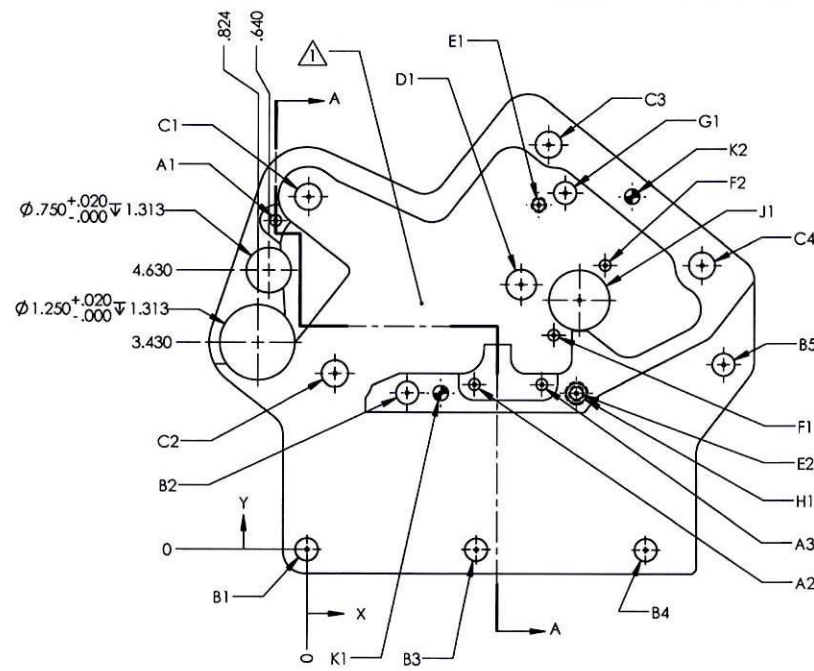
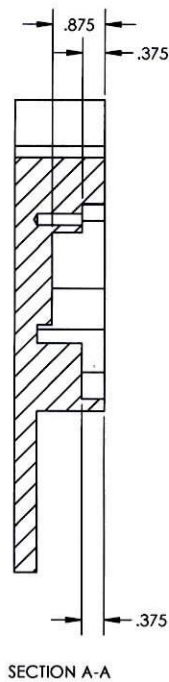
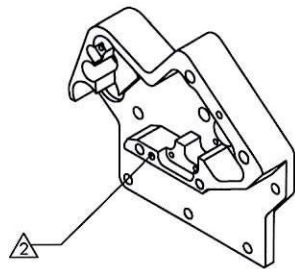
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				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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REVISIONS				
REV	ECR	DESCRIPTION	DATE	INITIAL
4		AS DRAWN BY CANAM	7/23/13	JAG
5		MODIFIED SHAPE TO MATCH PARTS, ADDED TOLERANCE TO HOLES.	7/23/13	JAG
6	14-0094	CHD TITLE BLOCK WAS RED BARN 3 DART, ADDED MACHINE ENGRAVE NOTE, ADDED HOLE DEPTH NOTE, ADDED DXF NOTE, ADDED DIMS .375, .375, .875.	7/28/14	DJN
7	16-0069	UPDATED TO NEW STANDARDS, CHD FINISH WAS CLEAR ANODIZE IS BLACK ANODIZE, ADDED ALIGNMENT PIN HOLES K1 & K2 2X Ø.2496-.2500 ±.0005, CHD DIM WAS Ø.375 THRU ALL IS Ø.375 ±.0005 THRU ALL, CHD NOTE WAS USE DXF IS USE CAD DATA.	7/8/2016	DPD



TAG	X LOC	Y LOC	SIZE
A1	-.530	5.450	Ø .188 ± 1.13
A2	2.780	2.740	
A3	3.902	2.740	
B1	.000	.000	Ø .375 ^{+.005} _{-.000} THRU ALL
B2	1.661	2.598	
B3	2.815	.000	
B4	5.630	.000	
B5	6.930	3.073	
C1	.015	5.845	Ø .440 THRU ALL
C2	.460	2.915	
C3	4.005	6.720	
C4	6.564	4.720	
D1	3.555	4.398	Ø .4986 _{.4982} THRU ALL
E1	3.845	5.718	1/4-28 UNF THRU ALL
E2	4.476	2.598	
F1	4.097	3.558	Ø .188 THRU ALL
F2	4.943	4.722	
G1	4.282	5.917	Ø .3734 _{.3730} THRU ALL
H1	4.476	2.598	3/8-24 UNF ± .625
J1	4.520	4.140	Ø 1.000 THRU ALL
K1	2.2204±.0005	2.5975±.0005	Ø .2500 _{.2496} ± 1.00
K2	5.3935±.0005	5.8594±.0005	

ASSY QTY	ASSY QTY	B/O	Part #	UNIT QTY	Description	Material	B/O INFORMATION OR SPECIFICATIONS
			4.5NR-25	1	SIDE PLATE SOLENOID	7075-T6	

NOTES:

1. MACHINE ENGRAVE BATCH NUMBER.
2. HOLE DEPTHS CALLED FROM THIS SURFACE.
3. USE CAD DATA TO MANUFACTURE.

DART AEROSPACE	
TITLE SIDE PLATE SOLENOID	
DWG NO. 4.5NR-25	REV 7
MATL: 7075-T6 FINISH: BLACK ANODIZE SPEC: MIL-A-8625F, TYPE II, CLASS II CHECKED BY: CANAM CLOUGH ANDERSON LINDSAY APPROVED: MACKOVJAK	
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES FRACTIONS ± 1/8 DECIMALS ± .005 ANGLES ± 5° SURFACES ± 125 1. BREAK ALL SHARP EDGES 2. DIMENSIONAL LIMITS APPLY 3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009 USED ON MODEL	
SCALE 1:2	DATE 10/14/1997
SHEET 1 OF 1	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER **PO040638**

Supplier: ARR002-VU
Arrow Tech Machine Works
29751 E. Enid Road,
Unit C
Eugene, OR 97402 USA
Phone: 541-780-6938
Fax: 458-215-4938

PO No: PO040638

PO Date: 7/30/18

Due Date: 8/20/18

Purchase Order

Revision:

Revision Date:

Ship-To Contact: Phone:

Pymt Terms: Net 30

Freight Terms:

Special Comments:

E-MAILED
JUL 30 2018

Ship To:

Items

Line Item	Job	Part	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (USD)	Extended Price
1		4.5NR-25P	Side plate Solenoid	Firmed	-	8/20/18	6 pcs	0 pcs	6 pcs	\$488.87/pcs	\$2,933.22

Line Item Note W/O 181468

AUG 17 2018

Grand Total: \$2,933.22

Order Notes

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A008 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION SENT TO DART AEROSPACE)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

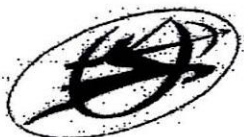
A049 SUPPLIER AWARENESS

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

[Handwritten signature]

Plex 7/30/18 8:18 AM dart.Lussier.Patrick

DAS
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3-89



**PHGE Machineworks dba
Arrowtech Machineworks**
29751 E Enid Rd. Unit C
Eugene, Oregon 97402
Phone: (541) 780-6938
Fax: (458) 215-4938

Customer Packing Slip

NO: 234

Date: 08/15/2018
PO Ref: 040705,040638
Ship via: Fedex Ground

Bill To:
Dart Aerospace
1270 Aberdeen St. Hawkesbury, ON
CANADA K6A 1K7

Qty
1 ✓
6 ✓

Item
PLATE, RIGGING-MIXER ✓
SIDE PLATE SOLENOID ✓

Part No.
RBA9930
4.5NR-25

Packaged by: *UP*
Checked by: *Q.E.*

Thank You



ARROW TECH MACHINE WORKS

Certificate of Conformance

Your Purchase Order No: 040638 Dated: 8/15/2018

Our Order / Job No:040638-AWT1 Order Qty: 6

Part Name: SIDE PLATE SOLENOID

Part Number: 4.5NR-25

Lot Size:N/A Ship Date: 8/15/2018

We certify that these parts shipped to you are of domestic or international manufacture and conform to all requirements of the Purchase Order. These parts have been manufactured and inspected in accordance with all required specifications, instructions and drawings. Any applicable specifications are listed below:

Drawing Number: 4.5NR-25 Rev: 7

Material Size and Type: 7075-T6 ALUMINUM

Material Specifications: ALUM: AMS QQ-A-250/12A

Heat Treatment:N/A

Plating/Finish: BLACK ANODIZE: MIL-A-8625F, TYPE II CLASS II

Mercury Contamination: The material used to process this order has not come in contact with mercury or mercury bearing instruments.

Date: 08/15/18

Signed: _____

DAS
38
9-89

PHGE Machine Works LLC dba Arrow Tech Machine Works
29751 E. Enid Rd. Unit C Eugene, Oregon 97402
Main: (541) 780-6938 | Fax: (458) 215-4938
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